WE CLAIM:

19. A micromirror unit comprising:

an inner frame including a frame body, an electrode base, and an insulating layer sandwiched between the frame body and the electrode base, the frame body being provided with outwardly extending comb-teeth electrodes, the electrode base being provided with inwardly extending comb-teeth electrodes;

an outer frame surrounding the inner frame, the outer frame including a frame member, a plurality of auxiliary portions, and an insulating layer sandwiched between the frame member and each of the auxiliary portions, at least one of the auxiliary portions being provided with inwardly extending comb-teeth electrodes interactive with the outwardly extending comb-teeth electrodes of the inner frame, at least another of the auxiliary portions being electrically separate from said one auxiliary portion;

a mirror forming base provided with a mirror surface, the mirror forming base being surrounded by the inner frame and provided with outwardly extending comb-teeth electrodes interactive with the inwardly extending comb-teeth electrodes of the inner frame;

an inner torsion connector connecting the frame body of the inner frame to the mirror forming base; and

an outer torsion connector which connects the inner frame to the outer frame and defines an axis about which the inner frame and the mirror forming base are rotated relative to the outer frame, the outer torsion connector having a width measured in a direction which is parallel to the mirror surface and perpendicular to said axis;

wherein the width of the outer torsion connector is relatively great at a connecting portion to the inner frame and becomes gradually smaller from the inner frame toward the outer frame; and

wherein the outer torsion connector comprises a plurality of torsion bars, at least one of the torsion bars connecting the frame body of the inner frame to the frame member of the outer frame, at least another of the torsion bars connecting the electrode base of the inner frame to said another auxiliary portion of the outer frame.

20. The micromirror unit according to claim 19, wherein the inner torsion connector defines an axis about which the mirror forming base is rotated relative to the inner frame, the torsion connector having a width measured in a direction which is parallel to the mirror surface and perpendicular to the axis of the inner torsion connector, the width of the inner torsion connector is relatively great at a connecting portion to the mirror forming base and becoming gradually smaller from the mirror forming base toward the inner frame.

21. The micromirror unit according to claim 20, wherein the axis of the inner torsion connector is perpendicular to the axis of the outer torsion connector.

22. The micromirror unit according to claim 19, wherein the inner torsion connector includes a plurality of torsion bars.

23. The micromirror unit according to claim 19, wherein the width of the inner torsion connector becomes monotonically smaller from the mirror forming base to the inner frame.

24. The micromirror unit according to claim 19, wherein the width of the outer torsion connector becomes monotonically smaller from the inner frame to the outer frame.

25. The micromirror unit according to claim 19, wherein the inner torsion connector has one of a rectangular cross section, a circular cross section and an elliptical cross section.

26. The micromirror unit according to claim 19, wherein the inner torsion connector has a hollow structure.

27. The micromirror unit according to claim 19, wherein the inner torsion connector includes a bifurcating portion.

28. The micromirror unit according to claim 19, wherein the inner torsion connector includes a curved connecting portion for prevention of stress concentration.

29. A micromirror unit comprising:

an inner frame including a first portion, a second portion, and an insulating layer sandwiched between the first portion and the second portion;

an outer frame surrounding the inner frame, the outer frame including a first portion, a second portion, and an insulating layer sandwiched between the first portion and the second portion of the outer frame;

a mirror forming base provided with a mirror surface and surrounded by the inner frame;

an inner torsion connector connecting the first portion of the inner frame to the mirror forming base; and

an outer torsion connector which connects the inner frame to the outer frame and defines an axis about which the inner frame and the mirror forming base are rotated relative to the outer frame, the outer torsion connector having a width measured in a direction which is parallel to the mirror surface and perpendicular to said axis;

wherein the width of the outer torsion connector is relatively great at a connecting portion to the inner frame and becomes gradually smaller from the inner frame toward the outer frame; and

wherein the outer torsion connector comprises a plurality of torsion bars, at least one of the torsion bars connecting the first portion of the inner frame to the first portion of the outer frame, at least another of the torsion bars connecting the second portion of the inner frame to the second portion of the outer frame.